slapping of the surface to aid reaction completed the treatment. This treatment was given daily during the first week, and the improvement in both general health and the articular symptoms was quite marked. He gained four pounds in weight. During the second week, two hot sulphur baths followed by massage, and four tonic baths were given; continuous improvement in the joint symptoms was noted, and the patient gained three pounds during this week. The third week's treatment was a repetition of the second, the patient gaining three pounds in a week, a total of ten pounds in the three weeks. The joint swelling had nearly all disappeared and he was able to get about without the aid of either crutches or cane.

Cases such as this, where the vitality has been greatly depressed by an excessive hot bath treatment, are much more frequently seen at health resorts than would be supposed. The reason for it is the prevailing popular idea that rheumatic and gouty conditions are only cured by a process of sweating. Hence, patients seeking these resorts for treatment, and without the advice of a physician, are very prone to carry it too far. This is particularly noticeable in patients whose vitality was low when commencing treatment. From this I contend that the most rational method to adopt in treating rheumatic and gouty patients at health resorts, is to regulate both diet and bathing, from the standpoint of physical condition rather than that of the theoretical considerations of etiology.

CASE OF DOUBLE SENILE CATARACT WITH SPONTANEOUS POSTERIOR DISPLACE-MENT OF BOTH LENSES.\*

By P. A. JORDAN, M. D., San Jose.

I wish to report the following case because of its comparative infrequent occurrence.

M. K., age 87; male; formerly policeman; confined to bed for the past four years with senile dementia. Has lain on his back most of the time; able to sit, stand, and take nourishment.

Patient was first seen by the writer two years ago, March, '04, in company with Dr. G. W. Fowler. Double senile cataract was readily diagnosed. The pupil of each eye plainly disclosed the pearly white cataract. The patient had light perception, and possible projection, though his demented condition forbade obtaining subjective tests. He could not see better than shadows. Extraction was considered, but his physical condition would not allow it. His white cataracts were plainly visible to the nurse, who three times a day brought him his food, and his blindness was also self evident.

One morning, three months later, when the nurse approached, the patient exclaimed, "I can see you." And on testing, it was found he could differentiate people, objects and colors. The pupils no longer disclosed white cataracts, but had the normal black appearance. Closer inspection revealed the lenses hanging backward in the vitreous. The zonula of Zinn had given way and gravity had favored backward dislocation.

In January, '06, atropine one per cent was instilled three times a day for seven days. No dilation followed. Iris was tremulous. The lenses up to time of death four weeks ago, were one-third their original size, and could be seen to flap up and down in the vitreous on motion of the eyes. An autopsy could not be obtained.

Remember our new address, 2210 Jackson Street, San Francisco.

### PROPRIETARY MEDICINES.

SOME GENERAL CONSIDERATIONS.\*

By GEORGE H. SIMMONS, M. D., Chicago.

PROPRIETARY MEDICINES.

A proprietary medicine is a preparation that is owned or controlled by an individual or individuals. This control is held either by a copyright or trade name, or by a patent. Proprietary preparations controlled by copyright or trade names are generally mixtures, and are often secret or semi-secret in character. It is the name of the article that protects it.

There is no objection to proprietary medicines per se, if we are to recognize the commercial rights of those who supply us with medicines. The commercializing of the literature relating to our materia medica, however,—which seems to be necessarily associated with proprietary interests—is against a true scientific spirit and is demoralizing, both to pharmacy and to medicine.

The ideal proprietaries are those that are made so by the manufacturers attaching their own and not a fanciful name to the preparation. For instance, Squibb's ergot is a proprietary preparation, in so far that if a physician prescribe for this preparation he will get Squibb's ergot as surely as he would if it were sold under some fanciful name. So with other articles, whether mixtures or simples, if the maker's name is attached. These are the ideal proprietaries and ought to be encouraged, for this means the encouragement of a high standard of quality.

### PATENTED. MEDICINES.

Patented medicines are those which are made patent or open; in consideration of the owner making known his methods of manufacture he is protected against infringement of his rights for a certain number of years.

Nearly all patented medicines are chemical compounds "made in Germany"; but, incidentally, it might be said they are not much used in Germany; at least not as much so as in this country. Theoretically, there is no objection to patented medicines; at least, they are not secret, nor is there anything mysterious about them. Practically, they have become almost as much of a nuisance as the nostrums because of their vast and ever-increasing number, and especially because the manufacturers are so extremely anxious to get physicians to prescribe them that they often stretch the truth to the breaking point in the literature describing their value as therapeutic agents.

"PATENT MEDICINES" AND PROPRIETARY MEDICINES.
Proprietary medicines, theoretically at least, may be divided into two classes: those that are sold directly to the public, and those that are put up for and advertised only to the medical profession. The former are called "patent medicines." This is an arbitrary, absurd, and meaningless term, but one that will doubtless continue to be used. The latter, those advertised to physicians, are usually called "proprietaries." But when the Proprietary Association of America, an organization made up principally of "patent medicine" men, discusses the prep-

<sup>\*</sup>To have been read at the Thirty-sixth Annual Meeting of the State Society, San Francisco, April, 1906.

<sup>\*</sup> Reprinted from the Journal A. M. A.

arations put up by its members, it always calls them "proprietary," and there is no reason why it should not. The fact is, there is no technical difference between "patent medicines" and "proprietary medicines." But it is generally understood that the term "patent medicine" refers to those that are advertised and sold direct to the public; and "proprietary medicines" to those used by physicians. For the time being we are concerned with the latter only.

#### NOSTRUMS AND ETHICAL PROPRIETARIES.

Every one acknowledges that there are some proprietaries which are fraudulent, or which, for some reason or other, should not be used by physicians. Even those who most bitterly oppose the work undertaken by the Council on Pharmacy and Chemistry acknowledge that there are some proprietaries on the market that are not what they ought to be; in other words, are not "ethical." But what are they, and why are they not "ethical"? Are all of the thousands of proprietaries offered to physicians good and worthy of their patronage? If not, why not?

The fact that we use such terms as "nostrum" and "ethical proprietary" indicates that there are good and bad proprietaries. Would it not relieve the situation if we could agree on some definition of these terms? Had we a general understanding of what we mean when we say a certain medicine is a nostrum, or an ethical proprietary, we would be able to discuss matters relating to this proprietary medicine question with a better understanding than is possible under present circumstances. In fact the whole problem rests on what we mean by these two terms. We know that a nostrum is a medicine that should not be used by a physician, and that an ethical proprietary is supposed to be all right. But why?

Nostrum (noster) literally means ownership, and thus should be synonymous with proprietary; and when we get away from this original meaning we begin to flounder among arbitrary definitions. Webster defines nostrum as "a medicine, the ingredients of which are kept secret for the purpose of restricting the profits of sale to the inventor or proprietor, a quack medicine"; Dunglison as "a secret or quack medicine." The term is certainly one of reproach and is meant as a slur on the medicine to which it is applied. And it is easy to understand how this meaning of reproach came when we realize that, even in the early days, any medicine that was controlled for profit by keeping its composition secret was regarded with disapprobation. Of course, secrecy was then necessary to ownership, as it is today with simple mixtures. And no matter how much we may labor to give a different meaning now, our forefathers considered any medicine a nostrum whose ownership was controlled by keeping its method of manufacture secret. This definition method of manufacture secret. would be considered too narrow to-day; we must be satisfied if the ingredients and their quantity are given; the details of manufacture may be kept secret. But what proportion of proprietary medicines on the market to-day would escape coming under even this liberal definition of the word nostrum?

And what of ethical proprietaries? Are all medicines whose composition is given, including the amount of each ingredient, "ethical" proprietaries? Then Ayer's Sarsaparilla, and other "patent medicines" which publish their formulas, would be "ethical." And what about those proprietaries that are advertised to cure incurable diseases, and which are exploited under false and extravagant claims with the deliberate intention of misleading physicians? Are these to be classed with "ethical" proprietaries? Is there no standard by which we may judge what are and what are not "ethical proprietary medicines?"

It seems to me there must be some such standard, and I wish to submit the following propositions as a basis for a definition for such preparations:

- 1. There should be no secrecy or mystery connected with their composition.
- 2. There should be no secrecy or mystery regarding the firm which makes them or the place where they are made.
- 3. There should be nothing in the advertising literature concerning their therapeutic value which is untrue or misleading.
- 4. They should not be advertised, directly or indirectly, to the public.

I believe that no one who has any regard for the rights of physicians, for scientific medicine, or for legitimate pharmacy, will deny the correctness of the principles of the above propositions.

# NO SECRECY OR MYSTERY.

1. Whatever is secret or mysterious is suspicious. This is a truism that needs no demonstration. Secrecy and mystery are the bulwarks of quacks and humbugs, and behind secrecy and mystery the "patent medicine" sharpers hide while they swindle the public; and with them the exploiters of nostrums delude and humbug unthinking physicians. Remove the secrecy and mystery connected with these preparations, and physicians who now prescribe some of them would be ashamed to acknowledge that they had ever been so foolish.

A physician not only has the right to know what he is giving his patient. but he has no moral right to prescribe a preparation of which he does not know the exact composition. Incidentally, we are facing a rather peculiar condition; the public is demanding and we are urging that the label on all "patent medicines" shall state the actual composition; and yet some of us are prescribing and so compelling our patients to buy and take preparations about whose composition we ourselves are ignorant. We are rightly demanding that the people shall be told exactly what they are taking when they prescribe for themselves. What will a layman say when he discovers that his physician is giving him a medicine whose composition his physician does not know? [The members of the Proprietary Association of America are fully alive to this weakness of the medical profession, as is shown in the editorials appearing in various newspapers throughout the country, which are obviously dictated by the press committee of the "patent medicine" men. The following quotation from the Newburgh Daily News. March 26,

may serve as an example: The article speaks of secret preparations which are sold to physicians only under high-sounding and coined names and which are prescribed by them in utter ignorance of their ingredients: "The name is intentionally puzzling and the drug may be composed of morphia, cocain, digitalis, strychnin or any other deadly drug for all the doctor knows: Arsenauro, Neurosine, Phenalgin, Svapnia. Firwein, Celerina, Dioviburnia, Ammonol, Peptenzyme, Borolyptol, Aletris Cordial, Apioline, Peacock's Bromids, Alkalithia, Urceden. Freligh's Tonic. These and many hundreds of others, including a number of coal-tar derivatives under different names, with their deadly heart depressing effects, which have been directly responsible for hundreds of sudden deaths, are blindly prescribed by the physician."]

Another fact should be mentioned, incidentally also, in this connection: The legislation for the protection of the public against frauds in "patent medicines" and foods, provides for the examination of these articles by experts, so that the statements of the manufacturers may be verified. Should there not also be experts to examine medicines offered to physicians and to verify the statements regarding the composition of medicines they use? Evidently not, judging from the vehement protests from certain quarters when the American Medical Association secured for this purpose the services of experts and created the Council on Pharmacy and Chemistry. It should be noted that in all proposed or enacted, legislation—national or state—the medicines used by physicians are exempt from its provisions; it is presumed that physicians know enough to take care that the medicines they use are what they ought to be. A sadly mistaken presumption this, judging from the past!

It is claimed that if the owner of a proprietary medicine should divulge the exact ingredients and the amounts of each, his rights would be gone, since others would make it. In reply, let me assure you that there is hardly a nostrum put on the market whose composition cannot be detected by the bright fellows connected with other manufacturing pharmaceutical houses, who, if they desire, can put up practically the same product, and this is actually done pretty generally. But it is true that if the formulas of at least 90 per cent. of the secret, or semi-secret, proprietaries on the market were made public, and if all secrecy and mystery regarding their actual composition were removed, there would be no more call for them by physicians, for there would be revealed to physicians what is known to experts who have looked into the matter, viz: that these wonderful preparations are very ordinary prescriptions which any educated pharmacist can compound. I am referring now to the thousands of articles that are foisted on our profession by what I shall refer to later as pseudo-chemical and pseudo-pharmacal companies; I do not include the so-called "elegant" non-secret pharmaceutical preparations, such as elixirs, syrups, tablets, capsules (especially when containing liquids), bougies, etc., that require more skill, or greater facilities, in their manufacture than is usually found in the ordinary retail drug store. and that are made by pharmaceutical houses which

employ skilled and scientific chemists and pharmacists and which have every facility for such work.

A common argument offered by the promoters of secret proprietaries is that they have spent time and money in developing them and, hence, cannot afford to give up their secrets. As regards this, I assert that the only expense attached to the development of ninety-nine out of every hundred of these preparations is that which has gone into bottles, labels, advertising literature, and in wages paid to smoothtongued detail men to visit and delude the doctors. In this they have undoubtedly spent money—lots of it, and successfully. But aside from this, all the talk about the time and money invested in developing these preparations is the veriest bosh. The capital required to start Antikamnia, a combination alleged to have been suggested by a physician, and which has netted a fortune to its owners, was simply that which was necessary for advertising. The ingredients were cheap and no skill was required to mix them. Ammonol, we are told, was the result of the suggestion of a physician that carbonate of ammonia should be used in the place of caffein to counteract the action of acetanilid on the heart; and Phenalgin, it is alleged, is simply the result of another "company" branching off from the Ammonol Company with practically the same mixture under another name. The amount of time and money required to work out the acetanilid mixture, Sal Codeia-Bell, I leave to your imagination. How much knowledge, time and money do you suppose were necessary to originate Tongaline, Neurilla, Pasavena, Anasarcin, Manola, Sanmetto, Ecthol, Neurosine, Benzol Capsules, and thousands—I am not exaggerating when I say thousands-of analogous preparations? Are these anything more than ordinary simple mixtures of well-known drugs? Do they require more than ordinary pharmaceutical skill to compound them? Are they any better combinations of drugs than the average physician is prescribing every day?

## RELIABILITY OF MANUFACTURERS.

2. Next to knowing what is in the combination we are using is the knowing who makes it, whether the manufacturer is competent, reliable and has the necessary equipment. Ordinarily, when we buy an article of commerce, regarding the quality of which we have no confidence in our own judgment, we select a responsible, established firm, one which has a reputation, and we take the firm as a guarantee that the article will be up to the standard and one on which we may rely. Should we not do the same when we select medicines to prescribe for our patients? And yet one of the most noticeable facts connected with the nostrum business is that the vast majority of these preparations are supplied us by firms about which we know little or nothing, and which, for a better, name, I designate "pseudo-chemical" or "pseudo-pharmacal" companies—companies which are created solely to exploit this class of medicines. These companies are not in the true sense manufacturing chemists or manufacturing pharmacists, if by these terms we mean that they are in the regular business of manufacturing the various chemical and pharmaceutical preparations. The latter have their catalogues or price-lists, which include

preparations official and non-secret, called for in the regular course of such business. They have more or less complete laboratories and expert chemists and pharmacists. While some of them put out preparations of a secret and more or less doubtful character, this is a side issue with them. Some "pseudo" companies are really connected with regular manufacturing and pharmaceutical houses, through which these houses exploit doubtful preparations, that, for reasons best known to them, they are ashamed to exploit openly. But the nostrum output of all the regular manufacturing pharmaceutical and chemical houses is trifling compared with the vast number that are foisted on our profession by companies that are in no sense regular manufacturing pharmacists.

If we should get behind the scenes we should find that the personnel of most of these "pseudo" companies consists of men who have no interest in, or knowledge of, either medicine or pharmacy. Many are merely promoters who have created a fictitious "company" through which to exploit to our profession some cheap nostrum. Once in a while the "company" will be found to consist of a doctor or a druggist, who sees in this "specialty business" easy money. Ex-advertising agents in several instances form the personnel of such "companies." One "company" that I have in mind consists of a realestate agent and a lawyer; originally it was a realestate agent and a druggist, but the lawyer and the real-estate agent put up a job on the druggist and he was squeezed out. The preparation this "chemical company" exploits is made by a regular manufacturing firm, and the "company" does not have to attend to even the labeling or boxing of its preparation. And yet this is a "chemical" company!

Some of our "ethical proprietaries" are furnished us by the same men who, under other names, are supplying the public with "patent medicines." Certain homeopathic pharmacies are running "pseudo" companies as a side line, and exploiting nostrums to the regular profession. And, as I have stated, a few old established pharmaceutical houses and retail druggists, under anonymous names, are doing likewise.

But while there is mystery connected with the personnel of many of these pseudo-companies, there is just as much mystery connected with the place of manufacture. Some of the "companies" have their preparations made for them by regular manufacturing houses just as many "patent medicines" are made. In other instances the "laboratory" is a back room in a business block not far removed from the business office; an ordinary store room on a side street often answers the purpose.

Let me suggest, therefore, that before prescribing a preparation we not only should know what it is, but also who makes it and where it is made. If the name of the manufacturer is not known let us find out something about him. If the "company" or individual is not a legitimate manufacturing concern, but is merely putting up one or two "specialties,"—often a dignified name for nostrums—we should be suspicious. We should be very suspicious if a detail man calls on us representing a "company" which

bears the same name as the product he is cajoling us to prescribe for our patients.

I am not making a plea for manufacturing pharmacists, at least so far as claiming that they are what they should be. On the contrary, I am sorry to say that too many of them are putting out "specialties" that are the veriest nostrums. Examination of some of the products of a few of the supposedly reliable houses has shown that our profession has been sadly deceived and humbugged by even such houses. But the number of regular manufacturing firms who have been practicing this deception is probably small, and the total number of nostrums of fraudulent preparations from all these houses is insignificant compared with those that emanate from the "pseudo" concerns.

The nostrum. or secret "specialty," is a side issue with legitimate manufacturing houses, and when they find that our profession is awake, they will stop this dishonorable business. While some of them will dislike to do this—for these "specialties" are very profitable—they will do so rather than have their legitimate business injured by exposure of their illegitimate. But what about those whose business consists entirely in making and exploiting nostrums? Will they give up willingly? Will they stop for fear of exposure? By no means. It is their livelihood. It is too lucrative a proposition to give up without a desperate fight. And as there are some three or four hundred of such concerns in this country, is there any wonder that this movement has met with tremendous opposition, an opposition which, combined, represents millions of dollars!

I want to emphasize this phase of the problem, and to declare as emphatically as I can, that the great bulk of the nostrums are put out by "companies" that are neither chemical or pharmacal, and that these "pseudo" concerns bear the same relation to legitimate pharmacy that the ignorant quack doctor bears to an educated honorable physician. And one is as great a curse to pharmacy and chemistry as the other is to medicine.

Just a word in regard to imported mixtures. There seems to be an impression among many of us that if an article is imported, it must be something good, reliable, "ethical" and above suspicion As a matter of fact, during recent years England, France and Germany—especially the latter two—have been sending mixtures to this country-mixtures that have been made especially for the American market, at least their sale is practically limited to this country-which are on a par with the nostrums of this country. Some of these foreign preparations are foreign in name only. Others are imported in a concentrated form and diluted here, and still others are imported as put up abroad. There are so many disreputable preparations among them, and they are advertised and exploited so often with such utter disregard for truth, that it is well to be suspicious of all. Further, while we are willing to recognize the superiority of the German chemists in certain lines, American pharmacy for a third of a century, has been leading the world-and is leading to-day. It is certainly not necessary to go abroad for our

pharmaceutical mixtures; but if we do, let us be sure that they are at least as good as, if not better than, those made by our own people.

### EXAGGERATED STATEMENTS.

3. Of course, every one-including the manufacturer-will agree with the third proposition: that no untruthful claims should be made regarding the therapeutic value of medicinal articles. And yet, what a reflection on the veracity of the manufacturer, and especially on the credulity and tolerance of the physician, is the great bulk of the advertising "literature" furnished by the manufacturers of proprietary medicines. I won't take time to illustrate, by quotations, the correctness of this statement. If any of you would criticise it, look at the "literature" that has come to your office during the past week, or at the advertising pages and "write-ups" in some of our medical journals. It is to our disgrace that we have so long put up with the foolish and extravagant claims and falsehoods of proprietary medicine men.

INDIRECT ADVERTISING TO THE PUBLIC.

4. The fourth proposition is the one to which a certain class of proprietary men most object; but to the physician it is the most important. The Council on Pharmacy and Chemistry incorporated this principle in Rule 4, which is:

Rule 4. No article will be admitted whose label, package or circular accompanying the package contains the names of diseases, in the treatment of which the article is indicated. The therapeutic indications, properties and doses may be stated. (This rule does not apply to literature distributed solely to physicians, to advertising in medical journals, or to vaccines and antitoxines.)

It is a manufacturer's business to sell his wares; it matters little to him who buys them. This is business. The manufacturer of drugs is no exception to this general proposition. Consequently, we cannot blame him if he tries to get the public to buy the wares he puts up—ostensibly "for physicians' use only." But physicians object to the advertising of medicines direct to the public—not for selfish reasons, but because their indiscriminate use by the public is more likely to be injurious than beneficial.

It is not necessary to give the reasons why the indiscriminate use and self-prescribing of medicines containing active or poisonous ingredients is detrimental to public health. Knowing the harmfulness of it, physicians emphatically object to the advertising of such medicines to the public.

Hence, few proprietary medicine manufacturers, who want physicians to use their preparations, do thus advertise. But practically all of them have been advertising indirectly to the public, until now without a protest on our part. This indirect advertising is by circulars accompanying the preparation and by labels on the bottles or containers, as well as by having the name of the preparation blown in the bottle.

Samuel Hopkins Adams charges that physicians are indirectly responsible for a large part of the "patent medicine" taking, and undoubtedly his charge is just. While the catchy name of the nostrum prescribed by the physician is partly to blame, it is the advertising matter which the layman gets

with the medicines that does the work. The labels and circulars tell him of the various diseases in which the medicine is indicated. This is the kind of advertising that costs nothing; and, evidently. it is considered "ethical" advertising. But, above all, this is the advertising that pays. The patient has confidence in his doctor; his doctor, the patient reasons, has confidence in this particular medicine, and, therefore, it must be good; and if it is good for the particular trouble for which the doctor prescribed, it must be good for the other diseases indicatedand their name is usually legion—on the label and in the circular. If those of you who are in the habit of prescribing proprietaries will examine a package at your drug store—just as the patient will get it, too often, in spite of your directions to the druggist to remove the label--vou will not wonder that so many of the proprietaries that have been on the market for any length of time are bought directly by the public, in much greater quantities than on physicians' prescriptions.

The manufacturer argues that the doctor himself wants to know what a preparation is good for. I reply, the doctor is not supposed to go to a drug store to learn his therapeutics. The manufacturer will see that the physician gets enough literature to keep him informed of the value of his preparation in every disease in which it is possible to use it. It is not usual for labels on official drugs and standard pharmaceuticals to contain the names of diseases in which the article should be used; neither should such indications be permitted on proprietaries. But so long as we tolerate this abuse, just so long will the manufacturers keep it up; and we cannot blame them; it is business. It is a method of exploitation that costs them nothing; they get the doctor not only to prescribe their preparations, but to put their literature in the hands of the public at the same time. And this literature has another and decidedly important effect: it aids and abets the druggists in counter prescribing. Has the time not arrived for us to demand of the manufacturer that he give us a square deal in this matter? Should we not insist that this indirect method of exploitation to the public shall cease?

Let us not blame the manufacturers for this nostrum business. We, and not they, are to blame. We have been allowing ourselves to be deluded without a protest. We have accepted commercialized literature in the form of therapeutic hints without question, and have been prescribing cheap drugs under a fanciful name, for which either we or our patients pay ten times their worth, without so much as a murmur.

The nostrum evil has grown until it is a curse to our profession. The use of proprietaries has become so common that the intelligent prescribing of well-known official drugs in their simpler form by many intelligent practitioners has become a lost art. The literature of the proprietaries has developed in many physicians an optimism and a contented spirit that has checked intelligent thought, independent action, and an ambition to progress. The nostrum business has cast a blight on our literature, debauched our medical journals, checked advance in scientific methods of treatment, and suborned the art of prescrib-

ing to the aggrandizement of commercial promoters. Can we not rid our profession of at least a part of this blight?

# THE NOSTRUM FROM THE VIEWPOINT OF THE PHARMACIST.\*

By W. A. PUCKNER, Professor of Chemistry, University of Illinois School of Pharmacy, Chicago.

While the responsibility of the medical teacher for existing conditions will be discussed by another speaker, I can not resist this opportunity offered me, a pharmacist permitted to address physicians, to say that without question the insufficient instruction in materia medica, pharmacology, pharmacy and chemistry offered by schools of medicine is the direct cause of present conditions.

I wish to point out to you how this lack of proper training along the lines indicated has made the physician dependent on ready-made remedies, proprietaries and nostrums, and how this, again, has been the making of "patent medicines," has led to self-medication and to counter prescribing, and has been the cause of making pharmacists forget their professional standing.

As a teacher, I would like to add that not only has the instruction in these subjects been inadequate because of the limited time allotted to them and because the student is led to attach too little importance to them, but often also because of the instructor's lack of familiarity with the subject which he is supposed to teach. This condition is but too frequently brought to my notice by former students who, having graduated in pharmacy, have taken up the study of medicine. As an illustration, I may refer to an article by Dr. Galloway 1 in which he protests against some haphazard, incorrect statements made by teachers in schools of medicine. Dr. Galloway reports statements made in favor of a certain brand of chloroform as opposed to another kind; statements so unfair and unwarranted that they can but be taken to show the lecturer's unfamiliarity with the subject he teaches. Other instances are cited which show that the lecturers, not being sufficiently familiar with the chemistry and pharmacy of medicines, are led to draw on the imagination and to offer to students statements which are entirely at variance with the facts.

Since the newly-graduated physician, therefore, has but a limited acquaintance with the remedies which he must employ, his prescriptions are liable to be unsightly, nauseating or, because of incompatabilities, perhaps inert. As a result of this two consequences are probable: First, if the patient discovers the physician's incompetency, when again in need of treatment he will go to his pharmacist for advice, since the pharmacist at least is familiar with the remedies which are used in the treatment of disease; second, when the physician comes to realize his lack of familiarity with medicines, then he most probably will fall back on the proprietary remedies, ready-made, with the dose on the label, of pleasant odor and taste and said to possess marvelous virtues.

The lack of familiarity with the common remedies often shown by physicians was strikingly

Were such physicians but competent to judge the effect of the remedies which they administer the dependence on proprietaries would not be so bad, since most, or at least many, possess some merit. Unfortunately, however, the physician's training is likely to be such that he can not distinguish the rank fraud from the efficacious remedy, honestly made and sold. It is this inability to judge the effect of medicine which has brought about the custom, now almost universal, of outrageously exaggerating the values of these proprietaries. The following will illustrate how a physician often is led to use absolutely worthless remedies: Some years ago a preparation was placed on the market under the name of "Flora China," which was claimed to be "pure quinin sulphate," but to be tasteless and to do all that the bitter quinin would do. In appearance the substance resembled quinin sulphate and it certainly was tasteless, but on examination 2 I found it to be nothing but crystallized calcium sulphate. Yet some five years later a student told me that a certain physician prescribed it and had used no other kind of quinin for years.

In this way a large portion of the medical profession has become dependent on the advertising literature and the detail men of proprietary dealers for the treatment of their patients. They listen to tales of the wonderful virtues of "bracemup" or "stimuline," written probably by a person having no knowledge of medicine whatever, or perhaps compiled from obsolete medical works.

Recently a letter sent by a pharmaceutical house to its salesmen ("detail men") came to my notice. This letter, after stating that a successful salesman must be a student of human nature, etc., went on to say that the educated physician should be approached something like this: "Doctor, I have here a prep--; if you employ this drug in your practice you will find that this preparation of the drug, manufactured by reliable and skillful pharmacists, contains the very best quality of the drug and is combined in such a way as to obtain the greatest good from the remedy." Then it went on to say that, as pharmacists, it is the business of the manufacturing pharmacists to put into the hands of physicians drugs of the highest quality, knowing well that physicians will know what use to make of them. The letter continued that, unfortunately, however, there was a great many physicians of inferior education along lines of materia medica and therapeutics with whom such arguments would fail, and who must be told that a certain preparation is good

brought to my attention recently. I was suffering from an attack of acute indigestion and called a physician; in due time the attendant placed a powder on my tongue and requested me to swallow it. The powder, which I later learned contained magnesium carbonate, at once formed a compact mass, firmly adhering to the tongue, much as plaster-of-Paris would. I asked for a little water and was informed that the physician had prohibited all food and drink, but that I might have a teaspoonful of water on promise not to swallow it. Naturally I removed the concretion still adhering to my tongue and made no further attempt to take the medicine.